U.S. Patent Application No.: 10/538,690

Filing Date: 10 June 2005

First Named Inventor: Yamada et al.

Current version of the Claims

This is a complete listing of claims and supersedes all other listings:

1. (previously presented) A saponified poly(vinyl acetate)-based photosensitive resin characterized by having a structural unit represented by formula (1):

(wherein R₁ represents H or Me; R₂ represents a linear or branched C2-C10 alkylene group; n is an integer of 1 to 3; X represents

$$\begin{array}{c|c} & & & & \\ & &$$

m is an integer of 0 to 6; and Y represents an aromatic ring or a single bond).

- 2. (original) A photosensitive resin composition comprising a photosensitive resin according to claim 1.
- 3. (original) A photosensitive resin composition according to claim 2, which further comprises a least one photopolymerization initiator.
- 4. (previously presented) A photosensitive resin composition according to claim 2, which further comprises water.
- 5. (previously presented) A method for forming a hydrogel comprising subjecting a photosensitive resin composition as recited in claim 2 to photopolymerization.
 - 6. (previously presented) A compound represented by formula (2):

U.S. Patent Application No.: 10/538,690

Filing Date: 10 June 2005

First Named Inventor: Yamada et al.

(wherein R₁ represents H or Me; R₂ represents a linear or branched C2-C10 alkylene group; X represents

m is an integer of 0 to 6; and Y represents an aromatic ring or a single bond).

7. (previously presented) A compound represented by formula (3):

(wherein R₁ represents H or Me; R₂ represents a linear or branched C2-C10 alkylene group; X represents

m is an integer of 0 to 6; Y represents an aromatic ring or a single bond; and each of R_3 and R_4 represents a C1-C3 alkyl group).

- 8. (previously presented) A photosensitive resin composition according to claim 3, which further comprises water.
- 9. (previously presented) A method for forming a hydrogel comprising subjecting a photosensitive resin composition as recited in claim 3 to photopolymerization.
- 10. (previously presented) A method for forming a hydrogel comprising subjecting a photosensitive resin.